



**NORTH DAKOTA DEPARTMENT OF HEALTH
Environmental Health Section**

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MEMO TO : All Portable Nuclear Gauge Licensees

FROM : Terry L. O'Clair, P.E. *TLO*
Director
For Division of Air Quality

RE : Information Notice 10-08-02: "Homeland Security
and Your Nuclear Gauge"

DATE : October 11, 2002

Enclosed is a copy of North Dakota Department of Health Radiation Control Program Information Notice 10-08-02: "Homeland Security and Your Nuclear Gauge". This information notice was issued to remind licensees of the importance of maintaining security of portable devices containing radioactive material during use, storage and transport.

It is expected that you will review this information for applicability to your licensed activities and consider actions, as appropriate, to ensure the safe and legal use of radioactive material in the State of North Dakota.

This notice is for your information only. No specific action nor written response is required. If you have any questions about this information, please contact the Radiation Control Program at 701-328-5188.

TLO/JMG:csc

Enc:

Environmental Health
Section Chief's Office
701-328-5150

Air
Quality
701-328-5188

Municipal
Facilities
701-328-5211

Waste
Management
701-328-5166

Water
Quality
701-328-5210

Website: www.health.state.nd.us/ndhd/enviro

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HOMELAND SECURITY AND YOUR NUCLEAR GAUGE

Homeland security is on the minds of everyone these days. Undoubtedly you have read stories in the newspapers or watched reports on television about the possibility of radioactive materials being used for illicit purposes (a.k.a. "dirty bombs"). Radioactive sources in portable gauges, such as moisture/density gauges and XRF devices, are among those devices which require constant diligence in maintaining security.

What does this have to do with you and your gauge? Well, during the period from January 1996 to October 2000 there were 156 reported thefts of nuclear gauges according to statistics maintained by the U.S. Nuclear Regulatory Commission (NRC). Only 40% of the stolen gauges were ever recovered. Most of the thefts occurred while gauges were stored in vehicles parked in areas away from the work site, often when the vehicle was parked at a private residence.

NRC's analysis indicates that many gauges were stolen from trucks even when the nuclear gauges were secured with chains. Frequently, the gauge cases were locked in an open truck bed, readily visible to the public. Sometimes the entire vehicle was stolen along with the gauge. Because of the heightened concern about homeland security, all nuclear gauge thefts are being turned over to the FBI for investigation.

So, what can you do to keep your gauges more secure during transport, avoid regulatory violations, penalties, fines, and to stay out of the headlines?? Here are some common sense suggestions:

1. **Reduce the visibility of the gauge.** Transport the gauge inside a closed vehicle (away from the passenger compartment), inside a tool box (away from the passenger compartment), or under a cargo cover to reduce visibility. For example, a bright yellow box with a radiation symbol and a big chain in the back of pick-up calls attention to itself as something valuable - something worth stealing. Furthermore, chains are easily and quickly cut.
2. **Require gauges to be locked inside closed or covered vehicle compartments or lock boxes.** Many types and styles of steel lock boxes are available that can be bolted directly to the vehicle and locked. In addition to reducing visibility, these lock boxes provide greater security than a chain.
3. **Do not park vehicles in areas vulnerable to theft.** This is especially important when radioactive material is on board. Unfortunately thefts can occur almost anytime and anywhere.
4. **Never leave the keys inside a vehicle when the vehicle is unattended.** This seems like a no-brainer, but some people still seem to believe that it's okay to leave the keys in the vehicle if they'll "be back a minute". Keys left in a vehicle is an open invitation to "take me" and it takes less than 10 seconds to do so. When your vehicle is stolen, the radioactive material on board is also considered stolen.
5. **Store the gauge at your permanent storage facility whenever the gauge is not in use.** Your permanent storage location is listed on your license. You should make sure that this location is very secure. Nuclear gauges should be stored here whenever possible.
6. **Hold special gauge user training to increase awareness of security.** Make sure that all personnel are aware of and understand the proper procedures for the physical security of gauges. It is a good idea to hold at least one session with all gauge operators annually. Usually these are performed at the beginning of each construction season and include a review of your company's security and radiation safety procedures.
7. **Conduct spot checks or inspections of operators in the field.** Hold operators accountable and perform unannounced "spot checks" or "field audits" to make sure that security and radiation safety procedures are being followed.
8. **Do not "loan" your gauge out to anyone.** It's difficult, almost impossible, to ensure the security and proper use of the device if it is "loaned out" to individuals who are not trained employees of your organization.
9. **Notify proper authorities.** Notify your local police and the Radiation Control Program immediately if your nuclear gauge(s) are lost or stolen.
10. **Be alert.** In addition, be alert for suspicious individuals or vehicles in or around your nuclear gauge storage locations. Allow only authorized personnel into gauge storage areas and report suspicious activities to the proper authorities.

If you have any questions about transportation and/or security of radioactive material, please contact the Radiation Control Program at 701.328.5188.